2.—Eurynome orientalis, a majid spider crab (Crustacea, Brachyura) new to Australia, and notes on E. granulosa

By D. J. G. Griffin*

Manuscript received and accepted 17 February, 1970

Abstract

Eurynome orientalis Sakai is a new record for Australia and E. granulosa new for Western Australia. The morphology of each species is discussed in relation to the original descriptions.

Introduction

During examination of the Western Australian Museum's (W.A.M.) collections of majid spider crabs in August 1967 four specimens were found which belonged to the genus *Eurynome*, small crabs which typically bear rather unusually shaped, mushroom-like (boletate) tubercles on the dorsal surface of the carapace (see Griffin, 1964). These four specimens proved to belong to *E. orientalis* Sakai, a species previously known only from Japan, and *E. granulosa* Baker, a species originally described from South Australia. The present paper contains notes on the two species. Terminology follows Griffin (1964). The specimens were collected by the Australian C.S.I.R.O. during cruises off Western Australia on H.M.A.S. "Diamantina."

Acknowledgements

I am grateful to Dr. R. W. George of the Western Australian Museum for making the specimens available for study, and the C.S.I.R.O. Science and Industry Endowment Fund which provided travel funds for the visit to the Museum and Dr. J. C. Yaldwyn, Dominion Museum, Wellington, for reading a draft of the manuscript.

Family MAJIDAE Samouelle, 1819 Genus Eurynome Leach, 1814

Eurynome orientalis Sakai (Fig. 1)

Eurynome orientalis Sakai, 1961: 140-141, textfig. 1c, d, pl. IV fig. 2; 1965: 79-80, pl. 37 fig. 5.

Material examined: S.W. of Point Cloates, W.A., 23°39'S., 113°11'E., beam trawl, 73 fms., 7/10/1963, H.M.A.S. "Diamantina" Cruise 6/63, C.S.I.R.O.. Sta. 187, 1 \degree c.l. 6.7 mm (WAM 328-67). N.W. of Carnarvon, W.A., 24°59'S., 112°27' E., beam trawl, 71 fms., 8/10/1963, H.M.A.S. "Diamantina" Cruise 6/63 C.S.I.R.O. Sta. 197, 1 \Diamond , c.l. 8.2 mm (WAM 58-67).

Remarks: The rostral spines and supraorbital eaves bear a few spinules on the lateral surfaces but are not serrate as Sakai mentions. The edges and upper surface of the intercalated spine are minutely spinulate, a feature not mentioned by Sakai. The central cone of the cardiac plate (or expansion) mentioned by Sakai is low in the male of the present pair but

* Australian Museum, Sydney, N.S.W.

high in the female; the intestinal plate is in the form of a smooth circular lobe bordered by blunt tubercles dorsally and flanked laterally by oval plates. The remaining plates and spines on the carapace are as described by Sakai; the small expansions on the carapace are starshaped.

The following features are not described by Sakai. The basal antennal article bears a few spinules on its surface and ends in two sharp The anterolateral angle of the merus spines. of the third maxilliped is spinulate. The carpus of the cheliped of the male bears, dorsally and laterally, 4 or 5 spines larger than the others; in the female the spines on the carpus are all about the same size. On the palm of the chela of the male about six spines on the dorsal and outer surfaces are markedly larger than the others. The relatively smaller chelae of the female have only two or three larger spines. The spines on the dorsal surfaces of the ambulatory legs are markedly larger than elsewhere.

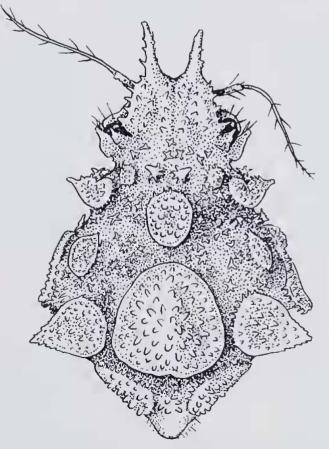


Figure 1.—Eurynome orientalis Sakai. Male, c.1. 8.2 mm, N.W. of Carnarvon, W.A. (WAM 58-67); carapace, dorsal view.

The differences between the present specimens and the original description given by Sakai are small. In other features, including the shape of the first pleopod in the male, there is very close agreement. The present specimens therefore represent the addition of another Japanese species to the Australian fauna.

Distribution: Sagami Bay, Japan, 75 metres. Western Australia between Carnarvon and North West Cape, 71-73 fms.

Eurynome granulosa Baker

Eurynome granulosa; Griffin, 1965: 30-34, figs. 1-5.

Material examined: W. of Rottnest I., W.A. $32^{\circ}00'S.$, $115^{\circ}16'E.$, beam trawl, 175-78 fms., 12/10/1963, H.M.A.S. "Diamantina" Cruise 6/63, C.S.I.R.O. Sta. 225, 19 (ovig.), c.l. mm, 19, cl. 6.7 mm (WAM 327-67).

Remarks: Comparison of these two specimens with the description of the holotype (Griffin, 1965) shows the following differences: The hepatic margin does not extend laterally further than the anteriorlateral edge of the branchial margin, the lateral surfaces of the rostral spines lack spinules, the tubercles on the branchial margins are blunt and not as distinct as in the holotype. The tubercles on the dorsal surface are not arranged in such distinct groups except that the group of tubercles forming a transverse row across the intestinal region is very obvious and consists of seven tubercles anteriorly and two close behind (in the holotype there are only five tubercles). The distal teeth on the fingers of the cheliped are present in the smaller specimen only. In all other features the two specimens from Western Australia agree with the type material.

Distribution: Off South Australian coast, 100-104 fms.; South Western Australia 75-78 fms.

References

- Griffin, D. J. G. (1964).—A review of the genus Eurynome Leach (Decapoda, Majidae) and a new species from New Zeaiand. Crustaceana 6: 195-206, figs. 1-11.
 - (1965).—A redescription of the Australian spider crab "Eurynome granulosa" Baker (Crustacca, Brachyura, Majidae). Rec. S. Aust. Mus. 15: 29-37, figs. 1-5.
- Sakai, T. (1961).—New species of Japanese crabs from the collection of His Majesty the Emperor of Japan. Crustaceana 3: 131-150, figs. 1-4, pis. III, IV.
 - (1965).—The crabs of Sagami Bay collected by His Majesty the Emperor of Japan. Tokyo: Maruzen. Pp. xvi, 1-206, 1-26 (English), 1-92, 27-32 (Japanese), 26 text figs., 100 pis., 1 map.